Summary of Preliminary Aquifer Drawdown Analysis for the City of Victoria Ground V

Basic Input Data

City's Population:	65,000	Datum: Initial	Sea Level	Porosity (%)	35.0	
		Reservoir		Permeability	C	Compressibility
Number of Water Wells:	15	Press. PSI	350.0	(md)	4,700	(1/PSI)
GW Production Rate:	1,000 Ac-Ft/Yr	Viscosity (cp)	0.75	Thickness (Ft)	220	
	21,276 Bbl/Day	Form. Vol. Fct	r. 1.0	, ,		

Model Results - Estimated Pressure and Hydrostatic Head Changes

		Drwdown @	Hydr. Head	Drwdown @	Hydr. Head	Drwdown @	Hydr. Head	Drwdown @	Hydr. Head
		1.0 Ft From	Change (Ft) @	10 Ft From	Change (Ft) @	100 Ft From	Change (Ft) @	1000 Ft From	Change (Ft) @
Y	ears of	No. 14 Well	1.0 Ft From	No. 14 Well	10 Ft From	No. 14 Well	100 Ft From	No. 14 Well	1000 Ft From
O	peration	PSI	No. 14 Well	PSI	No. 14 Well	PSI	No. 14 Well	PSI	No. 14 Well
	1	-24.3	-53.4	-19.3	-42.5	-14.3	-31.5	-9.3	-20.5
	10	-26.9	-59.2	-21.8	-47.9	-16.8	-37.0	-11.8	-26.0
	20	-27.6	-60.7	-22.6	-49.7	-17.6	-38.7	-12.5	-27.5
	30	-28.1	-61.8	-23.0	-50.6	-18.0	-39.6	-13.0	-28.6
	50	-28.6	-62.9	-23.6	-51.9	-18.6	-40.9	-13.5	-29.7

				Hydr. Head		Hydr. Head		Hydr. Head
	Drwdown @	Hydr. Head	Drwdown @	Change (Ft) @	Drwdown @	Change (Ft) @	Drwdown @	Change (Ft) @
	5000 Ft	Change (Ft) @	30000 Ft	30000 Ft	50000 Ft	50000 Ft	80000 Ft	80000 Ft
Years of	From No. 14	5000 Ft From	From No. 14	From	From No. 14	From	From No. 14	From
Operation	Well PSI	No. 14 Well						
1	-5.8	-12.8	-1.8	-4.0	-0.7	-1.5	0.0	0.0
10	-8.3	-18.3	-4.4	-9.7	-3.2	-7.0	-2.2	-4.8
20	-9.0	-19.8	-5.1	-11.2	-4.0	-8.8	-3.0	-6.6
30	-9.5	-20.9	-5.6	-12.3	-4.4	-9.7	-3.4	-7.5
50	-10.0	-22.0	-6.1	-13.4	-5.0	-11.0	-4.0	-8.8

Estimated Fluid Level Elevations (Feet Above/(Below) Sea Level) After Water Pre

Assume Aquifer Initial "Static" Fluid Level = 175 Feet Above Sea Level Source: Fluid Level at A. Bade No. 1 (Well No. 22 in UEC's Map). Fluid Level Assumed Static

	Hydr. Head		Hydr. Head		Hydr. Head		Hydr. Head	
	Change (Ft)	Fluid Level	Change (Ft)	Fluid Level	Change (Ft)	Fluid Level	Change (Ft)	Fluid Level
	@ 1.0	(Feet SL) @	@ 10 Ft	(Feet SL) @	@ 100 Ft	(Feet SL) @	@ 1000 Ft	(Feet SL) @
Years of	Ft From	1.0 Ft. From	From	10 Ft. From	From	100 Ft. From	From	1000 Ft. From
Operation	No. 14 Well	No. 14 Well	No. 14 Well	No. 14 Well	No. 14 Well	No. 14 Well	No. 14 Well	No. 14 Well
1	-53.4	121.6	-42.5	132.5	-31.5	143.5	-20.5	154.5
10	-59.2	115.8	-47.9	127.1	-37.0	138.0	-26.0	149.0
20	-60.7	114.3	-49.7	125.3	-38.7	136.3	-27.5	147.5
30	-61.8	113.2	-50.6	124.4	-39.6	135.4	-28.6	146.4
50	-62.9	112.1	-51.9	123.1	-40.9	134.1	-29.7	145.3

	Hydr. Head		Hydr. Head	Fluid Level	Hydr. Head	Fluid Level	Hydr. Head	
	Change (Ft)	Fluid Level	Change (Ft)	(Feet SL) @	Change (Ft)	(Feet SL) @	Change (Ft)	Fluid Level
	@ 5000 Ft	(Feet SL) @	@ 30000 Ft	30000 Ft.	@ 50000 Ft	50000 Ft.	@ 80000 Ft	(Feet SL) @
Years of	From	5000 Ft. From	From	From No. 14	From	From No. 14	From	80000 Ft. From
Operation	No. 14 Well	No. 14 Well	No. 14 Well	Well	No. 14 Well	Well	No. 14 Well	No. 14 Well
1	-12.8	162.2	-4.0	171.0	-1.5	173.5	0.0	175.0
10	-18.3	156.7	-9.7	165.3	-7.0	168.0	-4.8	170.2
20	-19.8	155.2	-11.2	163.8	-8.8	166.2	-6.6	168.4
30	-20.9	154.1	-12.3	162.7	-9.7	165.3	-7.5	167.5
50	-22.0	153.0	-13.4	161.6	-11.0	164.0	-8.8	166.2

Vater Supply Wells

1.90E-05

	Hydr. Head Change (Ft) @ 1320 Ft From
PSI	No. 14 Well
-8.7 -11.2	-19.1 -24.6
-11.9	-26.2
-12.4	-27.3
-12.9	-28.4

	Hydr. Head
Drwdown @	Change (Ft) @
110000 Ft	110000 Ft
From No. 14	From
Well PSI	No. 14 Well
0.0	0.0
-1.5	-3.3
-2.3	-5.1
-2.7	-5.9
-3.3	-7.3
-3.3	-7.3

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Hydr. Head	
Change (Ft)	Fluid Level
@ 1320 Ft	(Feet SL) @
From	1320 Ft. From
No. 14 Well	No. 14 Well
-19.1	155.9
-24.6	150.4
-26.2	148.8
-27.3	147.7
-28.4	146.6

Hydr. Head	Fluid Level
Change (Ft)	(Feet SL) @
@ 110000 Ft	110000 Ft.
From	From
No. 14 Well	No. 14 Well
0.0	175.0
-3.3	171.7
-5.1	169.9
-5.9	169.1
-7.3	167.7